

### **REMARKS**

This paper is in response to the Office action mailed on April 2, 2008. It is believed that, other than the terminal disclaimer fee submitted herewith, no additional fees are necessary in the subject application. However, in the event any further fees are due, kindly charge the cost thereof to our Deposit Account No. 13-2855.

### **Allowed Claims**

The Applicants note, with appreciation, the Examiner's indication that claims 21-34 and claims 38-42 are allowed.

### **35 U.S.C. § 102 Rejections**

Claims 1-12, 14-15, 18-20 and 35-37 were rejected under 35 U.S.C. § 102 as allegedly anticipated by Boger et al., U.S. Patent No. 6,453,261. The Applicants respectfully traverse the rejections. It is respectfully submitted that the interpretation of Boger et al. as "providing a lead-lag filter in communication with the control signal" is inaccurate. The lag that is implemented in the Boger et al. reference is a process lag, not a lag in terms of compensation, and therefore would not be considered within the definition of a "lead-lag filter" as used in the Applicants' specification, or as would be understood by those of ordinary skill in the art.

Moreover, the Applicants' claim 1 recites that the lead-lag filter is in communication with the control signal, which is a reference control signal at an input to a control loop. In claim 14, the lead-lag filter is recited to be "in communication with an input to the control loop." Claim 35 recites "providing a lead-lag input filter in communication with an input of a control loop." The Office action has not demonstrated how the Boger et al. reference discloses a lead-lag filter, nor has the Office action demonstrated how the Boger et al. reference discloses a lead-lag filter that

serves as an input filter. The lag to which the Office action refers in the Boger et al. reference is directed to feedback, rather than control loop input conditions.

The Office action cites Fig. 1, element 18; column 4, line 61-67; column 6, lines 13-24; column 24, lines 61-67; and column 28, lines 59-67 of Boger, et al. However, those passages of the reference only disclose process lag or time delay, as opposed to compensation lag. For example, at column 6, lines 13-14, Boger et al. state: "The time it takes for the actuator to build up sufficient pressure to start the valve moving is 'lag'". The Office action also relies on Figs. 11 and 12, and column 22, lines 50-65. These figures show feedback, rather than a lead-lag filter that is in communication with a reference control signal at an input to a control loop. As to claim 11, the Office action cites Fig. 18 and column 8, lines 26-62 of Boger et al. However, because the lag filter addressed in that portion of Boger, et al. is related to feedback, rather than an input control, and because the lag is referring to process lag, rather than compensation lag, the Boger et al. reference fails to anticipate the Applicants' claim 11. Because the independent claims 1, 14 and 35 are not anticipated by Boger et al., the claims depending therefrom should likewise be allowable over Boger et al.

For at least these reasons, it is respectfully submitted that the Boger et al. reference does not anticipate any of claims 1-12, 14-15, 18-20 or 35-37.

### **35 U.S.C. § 103 Rejections**

Claims 13, 16 and 17 were rejected under 35 U.S.C. § 103 as allegedly unpatentable over Boger et al., U.S. Patent No. 6,453,261, in view of Latwesen et al., U.S. Patent No. 6,466,893. The Applicants respectfully traverse the rejections. As discussed above with respect to claims 1-12, 14, and 15, Boger et al. does not disclose a lead-lag filter, as used in the Applicants' specification and as would be understood by those of ordinary skill in the art, because there is no

disclosure of a lag in the context of compensation. Rather, the Boger et al. reference's discussion of lag is limited to a process lag, *i.e.* a time delay. Furthermore, the lag discussed in Boger et al. is directed to feedback, rather than control loop input conditions. Thus, even if Boger et al. were modified or combined with Latwesen et al., U.S. Patent No. 6,466,893, in the manner proposed in the Office action, the result would not satisfy the Applicants' claims 13, 16 and 17.

### **Double Patenting**


Claims 1, 14 and 15 were rejected on the ground of non-statutory obviousness-type double patenting, as allegedly unpatentable over claim 1, 5 and 9 of U.S. Patent No. 7,349,745. In response, the Applicants submit herewith a terminal disclaimer and the requisite fee therefor.

### **Conclusion**

For at least the foregoing reasons, the Applicants respectfully submit the claims of the present application are in condition for allowance. The Examiner's favorable reconsideration is respectfully solicited.

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Respectfully submitted,

  
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